## amigos del **AMSTRAD**

AÑO II

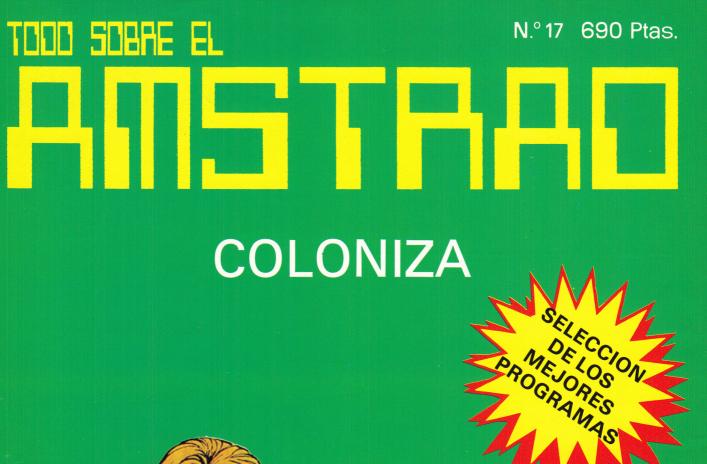
N.º 9

- CHINOS
- LOTO
- REPRESENTACIONES DIBUJANDO TEST
- SINTETIZADOR EJEMPLOS

- NEVERA
- PASILLO
- TRANS-SPAIN

• BI-LASER





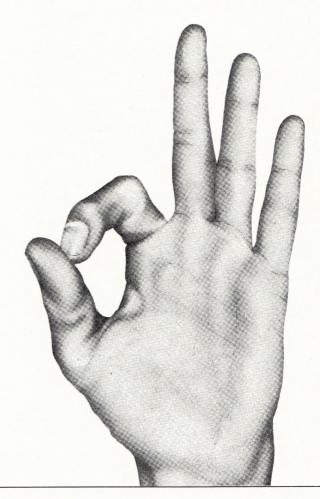


# AMIGOS DEL AMSTRAD

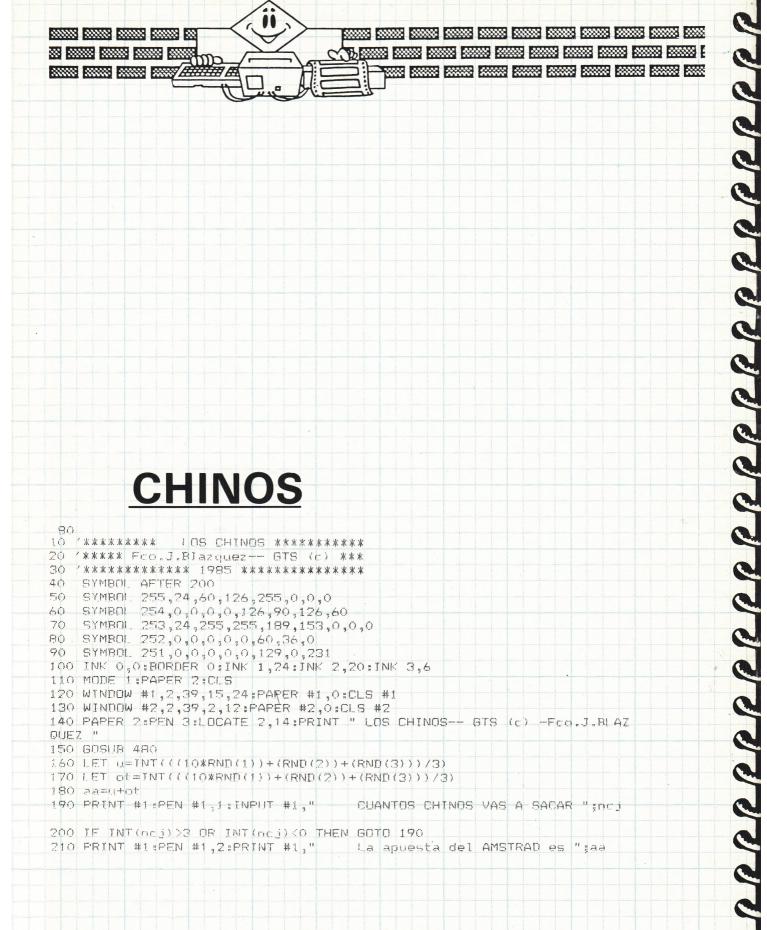
#### **SUMARIO**

- CHINOS
- LOTO
- REPRESENTACIONES
- RANCHO
- SINTETIZADOR
- QUINIELAS
- DIBUJANDO
- EJEMPLOS
- HECHIZO
- TEST

- NEVERA
- PASILLO
- TRANS-SPAIN
- BI-LASER



Edita: Editorial GTS. C/. Bailén, 20. 1.º Izda. 28005 MADRID. Secretaria Redacción: Margarita Rancero. Colaboradores: Eugenio Garrido, J.F. Martínez, J. Bernal, R. Carralón, J. Ramos, Juan Jesús Ortega. Dirección Artística y Técnica: Carlos Gorrindo. Publicidad: Bailén, 20. 1.º. 28005 MADRID. Imprime: GREFOL, S. A., Pol. II, La Fuensanta, Móstoles (Madrid). Distribuye: R.B.A. Promotora de Ediciones, S. A. Trav. de Gracia, 56. Atico 1.ª. Teléfono: 200 82 56. Depósito Legal: M. 3.988-1986.

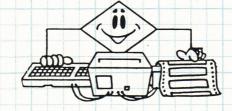


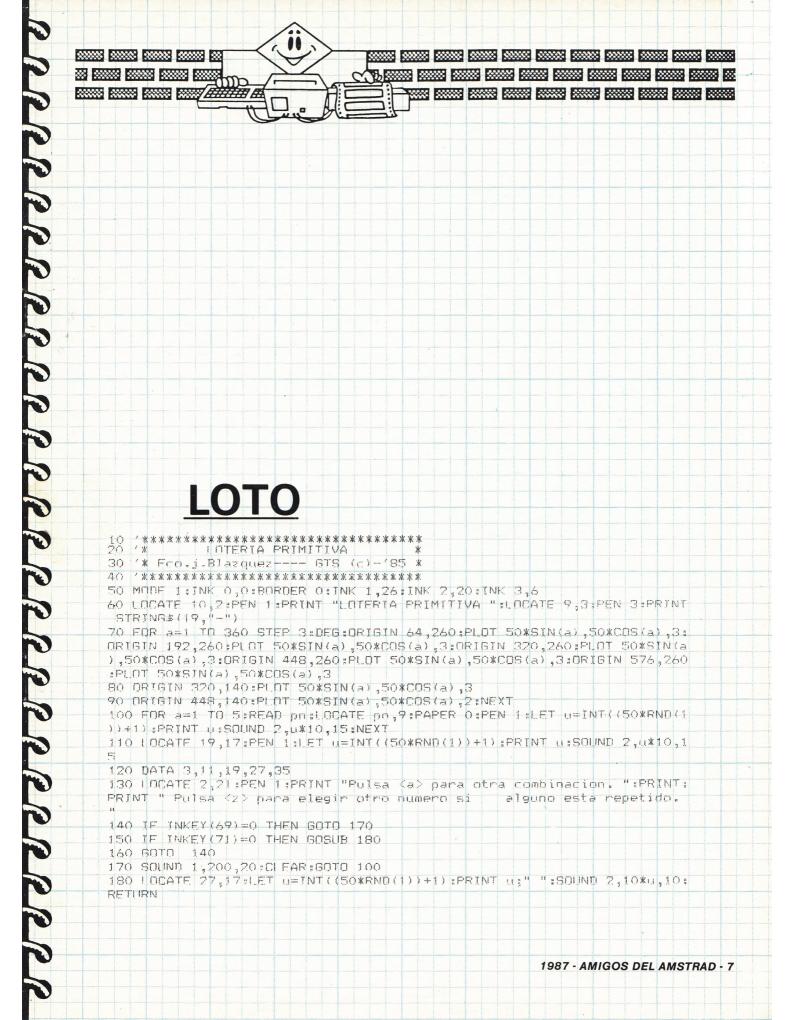
## **CHINOS**

```
to 'xxxxxxxxxx
              LOS CHINOS ********
   /**** Fco.J.Blazquez-- GTS (c) ***
30 / ********* 1985 *********
   SYMBOL AFTER 200
50 SYMBOL 255,24,60,126,255,0,0,0
60 SYMBO 254,0,0,0,0,126,90,126,60
70 SYMBOL 253,24,255,255,189,153,0,0,0
80 SYMBOL 252,0,0,0,0,0,60,36,0
90
   SYMBOL 251,0,0,0,0,0,129,0,231
100 INK 0,0:BORDER 0:INK 1,24:INK 2,20:INK 3,6
TIO MODE T:PAPER 2:CLS
120 WINDOW #1,2,39,15,24:PARER #1,0:CLS #1
130 WINDOW #2,2,39,2,12:PAPER #2,0:CLS #2
140 PAPER 2:PEN 3:LOCATE 2.14:PRINT " LOS CHINOS- GTS (c) -Fcd.J.BL4Z
OUEZ "
150 GOSUB 480
150 LET u=INT(((10*RND(1))+(RND(2))+(RND(3)))/3)
170 LET ot=INT(((10*RND(1))+(RND(2))+(RND(3)))/3)
180 22=0+01
190 PRINT #1:PEN #1,1:INPUT #1," | CUANTOS CHINOS VAS A SACAR ";ncj
200 IF INT(ncj)>3 OR INT(ncj)<0 THEN GOTO 190
210 PRINT #1:PEN #1,2:PRINT #1," La apuesta del AMSTRAD es ";aa
```

220 PRINT #1 PEN #1 1 INPUT #1." APUESTA " ; aj 230 IF INT(aj)>6 OR INT(aj)<0 THEN 60TO 220 240 PEN #1,2:PRINT #1:PRINT #1,"
250 PEN #1 1:PRINT #1:PRINT #1 " LA APUESTA DEL AMSTRAD ES ";aå 250 PEN #1,1:PRINT #1:PRINT #1, TU APUESTA ES " jaj 260 PEN #1,3:PRINT #1:PRINT #1," PULSA TECLA ": WHILE INKEY # ="":WEND:CLS #1 270 PRINT #1:PEN #1,1:PRINT #1," TU HAS SACADO ";ncj;" Y EL AMSTRAD"; L) 9 11 POR TANTO EL RESULTAD O ES "ju+ncj 280 IF aa=u+ncj THEN ta=ta+1:FOR m=1 TO 1500 STEP 100:SOUND 4,m, 10,14: NEXT 290 IF aj=u+ncj THEN tj=tj+1:FOR m=2000 TO 500 STEP-100:SOUND 4,m,to,1 4 : NEXT 300 PRINT #1:PEN #1,2:PRINT #1," PUNTUACION AMSTRAD ": ta 310 PRINT #1:PEN #1,3:PRINT #1," FUNTUACION TUYA ";tj 320 GOSUB 350 330 PEN #1,1:PRINT #1:PRINT #1," PULSA TECLA" # WHILE INKEY # = " " : WEND 340 CLS #1:CLS #2:60TO 160 350 LET atenci 360 PRINT CHR\$(22) 370 LOCATE 4,4:PEN 3:PRINT "TUS CHINOS:" 380 LOCATE 6,6:PEN 2:PRINT STRING\$(at,CHR\$(255)) 390 LOCATE 6,6:PEN 1:PRINT STRINGs(at,CHR\$(254)) 400 LOCATE 6,7; PEN 3:PRINT STRING \$ (at, CHR \$ (253)) 410 LOCATE 6,7:PEN 2:PRINT STRING\$(at,CHR\$(252)) 420 LOCATE 6,7:PEN 1:PRINT STRING\*(at,CHR\*(251)) 430 PEN 0:10CATE 3,12:PRINT CHR\$(22),1:PEN 440 LET at=u 450 LOCATE 28,4:PEN 2:PAPER 0:PRINT "SUS CHINOS:" 460 PRINT CHR\*(22):LOCATE 32,6:PEN 2:PRINT STRING\*(at,CHR\*(255)):LOCAT E 32,6:PEN 1:PRINT STRING (at, CHR + (254)):LOCATE 32,7:PEN 3:PRINT STRIN G\*(at,CHR\*(253)) 470 LOCATE 32,7:PEN 2:PRINT STRING\$ (at, CHR\$ (252)):LOCATE 32,7:PEN 1:PR JNT STRING\$(at,CHR\$(251)):PEN 2:PAPER 2:LOCATE 1,13:PRINT CHR\$(22) 1:P EN LEPAPER OFRETURN 480 GOSUB 580:FOR k=1 TO 145 490 READ no 500 ENV 3,1,1,10 510 SOUND 3,00,6,14 520 SOUND 2,no\*2,6,14 530 NEXT 27,80,80,80,80,80,80,80,80,80,80,80,84,84,84,84,95,95,95,95,95,104,104,104,104, 95,95,95,96,80,80,80,84,84,84,84,84,84,84,84 550 DATA 0,0,0 560 NATA 80,80,80,80,80,80,80,80,84,84,84,95,95,95,95,95,95,95,95,80,80 ,113,113,84,84,84,95,95,95,106,106,106,113,113,113,106,106,106,127,127 

570 CLS #2:RETURN 580 PRINT CHR\$(22):LOCATE 3,6:PEN 2:PRINT STRING\$(36,CHR\$(255)):LOCATE 3,6:PFN 1:PRINT STRING\$(36,CHR\$(254)):LOCATE 3,7:PEN 3:PRINT STRING\$( 36,CHR\$(253)):LOCATE 3,7:PEN 2:PRINT STRING\$(36,CHR\$(252)):LOCATE 3,7: PEN 1:PRINT STRING\*(36,CHR\*(251)):PEN 2 590 LOCATE 1,13:PRINT CHR\$(22),1:PEN 1 600 LOCATE 14,4:PEN 3:PAPER 0:PRINT " LOS CHINOS ":RETURN







## REPRESENTACIONES

```
/******** Frco.J. Blazquez
20 CLEAR: INICIALIZACION COMPLETA
30 MODE 2: INK 1,26: INK 0,0: BORDER 0
40 GOTO 570
50 CLS:PRINT:PRINT:PRINT:INPUT " > Nombre de la funcion a representar
```

电点页算法 40 PRINT:PRINT:INPUT " Introduce Maximo Valor > ":mv 70 PRINT:PRINT:INPUT " Introduce valor de Enero > ";e 80 PRINT:PRINT:INPUT " Introduce valor de Febrero > ";f 90 PRINT: PRINT: INPUT " Introduce valor de Marzo > ";m 100 PRINT: PRINT: INPUT " Introduce valor de Abril Introduce valor de Mayo > ":mu 110 PRINT:PRINT:INFULT " 120 PRINT: PRINT: INPUT " Introduce valor de Junio> ";j Introduce valor de Julio > ":j] 130 PRINT:PRINT:INPHT " Introduce valor de Agosto > ";ag 140 PRINT:PRINT:INPUT " 150 PRINT:PRINT:INPUT " Introduce valor de Septiembre > ";s

Introduce valor de Octubre > ";o Introduce valor de Noviembre > ";n 160 FRINT: FRINT: INPUT " 170 PRINT : PRINT : INPUT " Introduce valor de Diciembre > "¡dic 180 PRINT:PRINT:INPUT "

Pulsa <f> para ver grafica 190 PRINT FRINT PRINT "

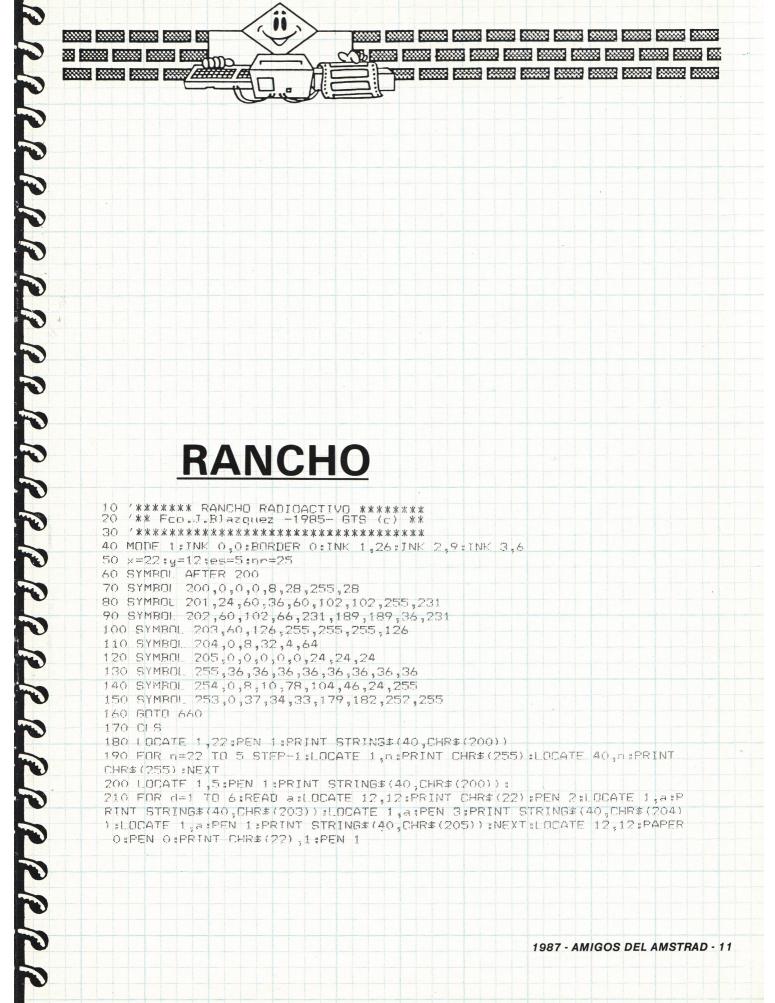
plana rechificar "

Pulsa (r)

200 JF INKEY (50) = 0 THEN GOTO 50 210 JF INKEY(53)=0 THEN GOTO 230 220 GOTO 200 230 | ET e=INT((180\*e)/my) 240 LET f = INT((180\*f)/my)250 LET m=INT((180 km)/mV)260 LET a=JNT((180 Ma)/mV) $270 + \text{FT} \cdot m_{\text{H}} = \text{TNT} \left( \left( 180 \times m_{\text{H}} \right) / m_{\text{V}} \right)$ 280 | ET j = INT((180\*i)/mv)290 LET jl=INT((180\*j1/mv)) 300 LET ag=INT((180\*ag/my)) 310 LET S=[NT((180\*S/my)) 320 LET (0=JNT((180\*0/mv)) 330 LET h=[NT((180\*n/mv)) 340 | ET dic=[NT((180\*djc/my)) 350 CLS 360 FOR 1k=1 TO 5:08IGIN 5+1k,5+1k:0RAW 0,369:0RIGIN 5+1k,5+1k:0RAW 60 O,O:NEXT 370 LOCATE 5,12:PRINT " Ene Feb Mar Abr May Jun Jul Ag S ent Nov Dic" 380 LOCATE 72,2:PRINT ROUND (mv,2):LOCATE 72,7:PRINT ROUND (mv/2,2):LOCA TE 72,13:PRINT fo:LOCATE 72,18:PRINT ROUND(-mv/2,2):LOCATE 72,24:PRINT ROUND (-my 2) 390 LOCATE 34,1:PRINT "F ":cg\$;" ]" 400 FOR h=1 TO 570 STEP 3.3:ORIGIN 20+h,200:PLOT 0,0:NEXT 410 FOR k=1 TO 550 STEP 3.3:0RIGIN 20+k,380:PLOT 0.0:0RIGIN 20+k,290:P LOT 0,0:0RIGIN 20+k,110:PLOT 0,0:0RIGIN 20+k,20:PLOT 0,0:NEXT 420 FOR d=0 TO e STEP(e/10):FOR b=1 TO 35 STEP 2:ORIGIN 40+b,200:DRAW O. d : NEXT : NEXT 430 FOR d=0 TO f STEP(f/10) FOR b=1 TO 35 STEP 2 ORIGIN 85+6,200 DRAW O. CHINEXT: NEXT 440 FOR d=0 TO m STEP(m/10) FOR b+1 TO 35 STEP 2:0RIGIN 130+6,200:DRAW O,d:NEXT:NEXT 450 FOR d=0 TO a STEP (a/10) #FOR b=1 TO 35 STEP 2 #ORIGIN 175+b,200 \*DRAW O.d:NEXT:NEXT 460 FOR d=0 TO my STEP(my/10) :FOR b=1 TO 35 STEP 2:0RIGIN 220+b,200:DR AW O d NEXT : NEXT 470 FOR d=0 TO j STEP(j/10) FOR b=1 TO 35 STEP 2:0RIGIN 265+6,200:DRAW O,d:NEXT:NEXT 480 FOR d=0 TO j) STEP(j)/10):FOR b=1 TO 35 STEP 2:ORIGIN 310+6,200:DR AW O. d : NEXT : NEXT 490 FOR d=0 TO ag STEP(ag/10):FOR b=1 TO 35 STEP 2:ORIGIN 355+b,200:DR AW O. d : NEXT : NEXT 500 FOR d=0 TO s STEP(s/10) :FOR b=1 TO 35 STEP 2:ORIGIN 400+b.200:DRAW O,d:NEXT:NEXT 510 FOR d=0 TO o STEP (o/10) FOR b=1 TO 35 STEP 2:0RIGIN 445+b.200:0RAW O,d:NEXT:NEXT 520 FOR d=0 FO n STEP(n/10) | FOR b=1 TO 35 STEP 2 | ORIGIN 490+6,200: DRAW O,d:NEXT:NEXT

530 FOR d=0 TO dic STEP(dic/10) | FOR b=1 TO 35 STEP 2:ORIGIN 535+6,200: DRAW O, d:NEXT:NEXT 540 LOCATE 20,24 PRINT " PULSA (E) PARA OTRA REPRESENTACION " 550 JF TNKEY (58) =0 THEN BOTO 10 560 GOTO 550 570 GLS: PRINT: PRINT " REPRESENTAC I ONES .... .... .... ... ... ... ... ... ... ... ... ... ... ... ... ... ... ... 580 PRINT:PRINT ' La finalidad de este programa es la represe ntacion grafica de cualquier tabla de valores. Su forma es anual pero se puede emplear " 590 PRINT:PRINT " | sin tener en cuenta esta predisposicion del prog rama.La representacion " 600 PRINT : PRINT " es por medio de barras mensuales .con una escala comparativa para poder apreciar no so lo el valor relativo de cada barra respecto" 610 PRINT : PRINT " a las otras, sino tambien su valor real. Introduce los datos segun te los vaya pidiendo el ordenador " 620 PRINT: PRINT: PRINT: PRINT " PULSA TECLA (S> PARA EMPEZAR " 640 IF INKEY (60) =0 THEN GOTO 50 650 GOTO 640





#### **RANCHO**

```
30 /*******************************
40 MODE 1: INK 0,0: BORDER 0: INK 1,26: INK 2,9: INK 3,6
50 \times = 22 : y = 12 : es = 5 : nc = 25
60 SYMBOL AFTER 200
         200,0,0,0,8,28,255,28
70 SYMBOL
80 SYMBOL 201,24,60,36,60,102,102,255,231
```

90 SYMBOL 202,60,102,66,231,189,189,36,231 100 SYMBOL 203,40,126,255,255,255,126 110 SYMBOL 204,0,8,32,4,64 120 SYMBOL 205,0,0,0,0,0,24,24,24 130 SYMBOL 255,36,36,36,36,36,36,36,36

254,0,8,10,78,104,46,24,255 140 SYMROL 150 SYMBOL 253,0,37,34,33,179,182,252,255

160 BOTO 660

170 CLS

180 LOCATE 1 22:PEN 1:PRINT STRING\$ (40,CHR\$ (200))

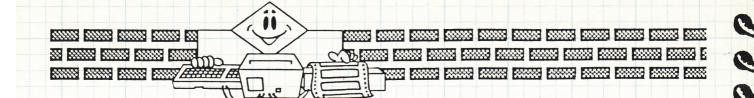
190 FOR n=22 TO 5 STEP-1:LOCATE 1.n:PRINT CHR#(255):LOCATE 40,n:PRINT CHR\$ (255) : NEXT

200 LOCATE 1,5:PEN 1:PRINT STRING\*(40,CHR\*(200)):

210 FOR d=1 TO 6:READ a:LOCATE 12,12:PRINT CHR#(22):PEN 2:LOCATE 1,a:P RINT STRING\*(40,CHR\*(203)):LOCATE 1,a:PEN 3:PRINT STRING\*(40,CHR\*(204) ):LOCATE 1;a:PEN 1:PRINT STRING#(40,CHR#(205)):NEXT:LOCATE 12,12:PAPER O:PEN O:PRINT CHR#(22),1:PEN 1

```
nangarenengenengenengenengen
220 DATA 23,24,1,2,3,4
230 FOR c=1 TO 100:ORIGIN 240+c,352:DRAW 0,25,1;ORIGIN 253+(c/8),362:D
RAW 0,8,0:NEXT:FOR c=1 TO 100:ORIGIN 315+(c/8),362:DRAW 0,8,0:ORIGIN 2
80+(c/5),352:DRAW 0,16:NEXT
240 FDR d=1 TO 60:ORIGIN 230+d,379:DRAW 0,(d/5),3:ORIGIN 350-d,379:DRA
W 0, (d/5),3:NEXT
250 FOR W=1 TO 17:LOCATE 2+(INT(40*(RND(1)))),6+(INT(17*(RND(1))));PE
N 2:PRINT CHR# (254):NEXT
260 FOR W=1 TO 14:LOCATE 2+(INT(40*(RNO(1)))),6+(INT(17*(RNO(1))));PE
N 3:PRINT CHR$(253):NEXT
270 'EVERY 100,1 GOSUB 400
280 LOCATE 3,2:PEN 3:PRINT " RESCATADOS: ":LOCATE 6,4:PRINT " ";c;" ":
OCATE 26,2:PRINT " CUENTA ATRAS: ":LOCATE 31,4:PRINT " ":s;" "
290 LOCATE 3,23:PEN 3:PRINT " ESCAFANDRAS: ";es;" "
300 LOCATE 22,23:PEN 3:PRINT " EN EL SUELO:";s;" "
310 LOCATE 18,4 : FRINT " "
320 LOCATE 8,25:PEN 2:PRINT "Fco.J.Blazquez-1985- GTS (c)"
330 GOSUB 590
340 LOCATE x,g:CALL &BD19:PEN 1:PRINT CHR$(202):LOCATE x,g:CALL &BD19:
PRINT " "
350 TF INKEY (69) =0 THEN u=u-1
360 TF TNKEY (71) =0 THEN 1 = 1+1
370 IF TWKEY (30) =0 THEN x=x-1
380 IF INKEY (22) = 0 THEN x = x + 1
390 ORIGIN 0,0
400 IF NOT TEST ((16*(x+1)),400-(16*y))=0 THEN GOSUB 510
410 LET nr=nr-1:PEN 3:LOCATE 31,4:PRINT " ";nr;" ":IF nr=0 THEN GOSUB
420 IF x<2 THEN x=2
430 \text{ TF } \times 39 \text{ THEN } \times =39
440 IF us then u=6
450 IF y>21 THEN y=21
460 JF =>19 OR es<1 THEN 540
470 GOTO 340
480 LET an=16:LET s=s+1:PEN 3:LOCATE 34,23:PRINT " ";s;" ":PEN 1:LOCAT
E 2+(INT(40*(RND(1)))),6+(INT(17*(RND(1)))):PRINT CHR*(201):RETURN
490 LET ment1:PEN 3:LOCATE 6,4:PRINT " ";n;" ":LET s=s-):PEN 3:LOCATE
34,23:PRINT " ":s:" ":RETURN
500 LET es=es-1:REN 3:LOCATE 15,23:PRINT " ";es;" ":SOUND 4,1000,2,15:
510 IF TEST((16*(x-1)),400-(16*y))=1 THEN GOSUB 490
520 IF NOT TEST ((16*(x-1)),400-(16*y))=1 THEN GOSUB 500
530 RETURN
540 WINDOW #1,2,39,6,21:015 #1:PAPER 0:PEN 1:PRINT #1:PRINT #1:PRINT #
1:PRINT #1," LA RADIOACTIVIDAD HA CONTAMINADO
                                                            TH RANCHO . . .
550 PRINT #1:PRINT #1:PRINT #1;"
                                               MIRA LOS MARCADORES Y PRE
PARATE
                                                             PARA OTRO I
NTENTO."
560 FOR ab=0 TO 35 STEP 2:10CATE 4+ab, 18:PRINT CHR$(22):PEN 2:LOCATE 4
+ab,18:PRINT CHR$(203):LOCATE 4+ab,18:PEN 3:PRINT CHR$(204):LOCATE 4+a
b,18:PEN 1:PRINT CHR$(205):NEXT:LOCATE 12,12:PAPER 0:PEN 0:PRINT CHR$(
22),1:PFN 1
12 - AMIGOS DEL AMSTRAD - 1987
```

570 FOR ab=0 TO 35:PEN 1:LOCATE 4+ab, 20:PRINT CHR# (200):NEXT 580 CLEAR: RESTORE 630: GOSUB 590: CLEAR: RESTORE 630: GOSUB 590: CLEAR: GOTO 40 590 FOR k=1 TO 110:READ no 600 ENV 1,15,1,2,1,0,5,15,-1,4 610 ENT 1,100,1,2 620 SOUND 1,00\*1.5,17,14:NEXT 630 DATA 319,319,319,284,284,284,253,253,253,213,213,213,213,213,213,213,2 90,190,190,213,213,213,239,239,159,159,159,159,159,159,319,319,319,284 ,264,264,253,253,253,213,213,213,213,213,190,190,190,213,213,213,213,239,2 39,239,284,284,284,284,284,284,319,319,319 640 DATA 284,284,253,253,253,213,213,213,213,190,190,190,190,213,213,2 53,253,253,319,319,319,319,319,319,159,159,159,159,159,159,159,159,190,190 ,213,213,190,190,190,319,319,319,284,284,284,288,253,253,253,253 450 RETURN 660 CLS:LOCATE 1,24:PEN 1:PRINT STRING\$(40,CHR\$(200)):FOR n=24 TO 2 ST FP-1:LOCATE 1,n:PRINT CHR\$(255):LOCATE 40,n:PRINT CHR\$(255):NEXT:LOCAT E 1,2:PEN 1:PRINT STRING\$ (40,0HR\$ (200)) 670 LOCATE 12,6:PEN 1:PRINT "RANCHO RADIOACTIVO" 680 | OCATE 11,8:PEN 3:PRINT STRING\$(19,CHR\$(201)) 690 WINDOW #6,2,39,10,24:PEN #6,1 700 PRINT #6,". TRATA DE SALVAR TU RANCHO DE LA LLUVIA DE MISILES MORTALES " 710 PRINT #4 PRINT #4," SOLO DISPONES DE 5 ESCAFANDRAS! 720 PRINT #6:PRINT #6:PRINT #6," MANDOS [A]-Subir TZJ-B ajar [/]-Denecha T.\J-Jzda " 730 FEN 3:100ATE 1,25:PRINT " PULSA KE> PARA EMPEZAR " 740 JE INKEY (58) = 0 THEN GOTO 170 750 GOTO 740 1987 - AMIGOS DEL AMSTRAD - 13



## **SINTETIZADOR**

```
10 /*********** SINTETIZADOR ********
20 /**** GTS (c) Fco.J.BLAZQUEZ ****
30 /********** 1985 ********
```

40 MODE 1:INK 0,0:BORDER 3:INK 2,26:INK 1,2:INK 3,3:PAPER 3:CLS

50 SYMBOL AFTER 140

60 SYMBOL 143,0,28,62,255,62,28,0,0

70 LET d=8:v=15

80 LOCATE 2.25:PEN 2:PAPER 3:PRINT " GTS (c)-1985-Fcd.J.Blazquez

90 WINDOW #1,29,39,1,12:PAPER #1,0:CLS #1

100 GOSUB 510 :LOCATE 4,1:PEN 1:PAPER 3:PRINT " D R M F S L S D R M F" :PAPER 2:SPFED KEY 1,1

110 PEN #1,2:PRINT #1:PRINT #1," DURACION: ";d:PRINT #1," VOLUMEN: ": V:PRINT #1:PFN #1,1:PRINT #1," PULSA <q) ":PRINT #1," CAMBIO"

120 IF INKEY(71)=0 THEN GOSUB 330

130 ON BREAK GOSUB 590

140 TF TNKEY (63) = 0 THEN GOSUB 340

150 IF INKEY(67) = 0 THEN GOSUB 600

160 TF INKEY(62)=0 THEN GOSUB 350

170 TF TNKEY (55) +0 THEN 608UB 360

180 TF [NKEY (54) =0 THEN GOSUB 370

460 PAPER O: LOCATE 15,19:PEN 1:PRINT CHR\$(143):SOUND 1,338,d,v:LOCATE 15,19:PRINT " ":PAPER 2:RETURN 470 PAPER 0:LOCATE 19,19:PEN 1:PRINT CHR\$(143):SOUND 1,301,d,v:LOCATE 19,19 : PRINT " ": PAPER 2: RETURN 480 PAPER 0:LOCATE 22,19:PEN 1:PRINT CHR\$(143):SOUND 1,268,d,V:LOCATE 22,19:PRINT " ":PAPER 2:RETURN 490 PAPER 0: LOCATE 29,19:PEN 1:PRINT CHR\$ (143):SOUND 1,225,d,v:LOCATE 29,19:PRINT " ":PAPER 2:RETURN 500 PAPER O:LOCATE 32,19:PEN 1:PRINT CHR#(143):SOUND 1,201,d,v:LOCATE 32,19:PRINT " ":PAPER 2:RETURN 510 FDR t=20 TO 620 :ORIGIN t,20:DRAW 0,170,2:NEXT 520 ORIGIN 20,20:DRAW 600,0,0:DRAWR 0,170:DRAWR -600,0:DRAWR 0,-170 530 FDR t=20 TO 620 STEP 54.5:ORTGIN t,20:DRAW 0,170,0:NEXT 540 FDR da=1 TO 7:READ st:FOR f=-5 TO 25:ORIGIN 20+((st\*54.5)-10)+f,80 :DRAW 0,110,0:NEXT:NEXT 550 DATA 1,2,4,5,6,8,9 560 FOR w=248 TO 380 STEP 32:ORIGIN 40, w:DRAW 380,0,2:NEXT 570 FDR rt=1 TO 11:LOCATE 3+(2\*rt),13-rt:PAPER 2:PEN 1:PRINT CHR\$(143) :NEXT 580 RETURN 590 SPEED KEY 20,1:END 600 SPEED KEY 20,1:CLS #1:PRINT #1:INPUT #1," Duracion";d:PRINT #1:IF d<0 DR d>200 THEN GOTO 600

610 INPUT #1," Volumen"; V:IF V<0 OR V>15 THEN GOTO 610

620 PRINT CHR\$(7):CLS #1:PEN #1,2:PRINT #1:PRINT #1," DURACION:

"; v: PRINT #1: PEN #1,1: PRINT #1," PULSA <q)

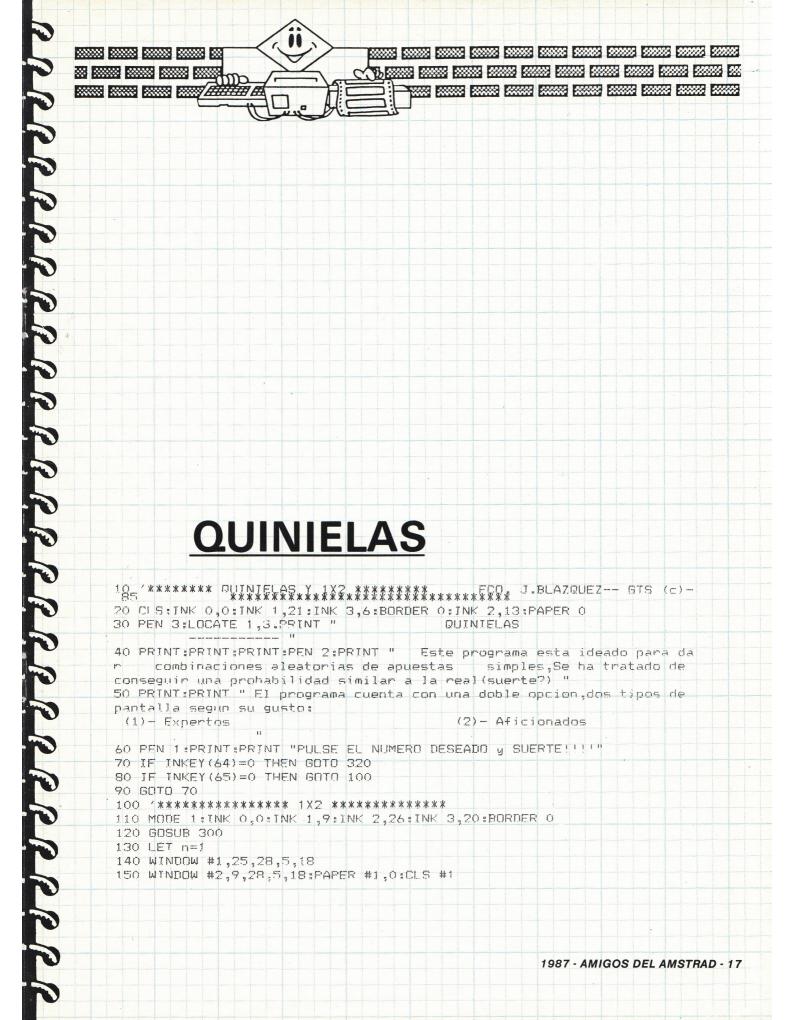
CAMBIO" : RETURN



d:PRINT #1," VOLUMEN:

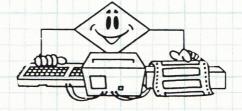
PARA

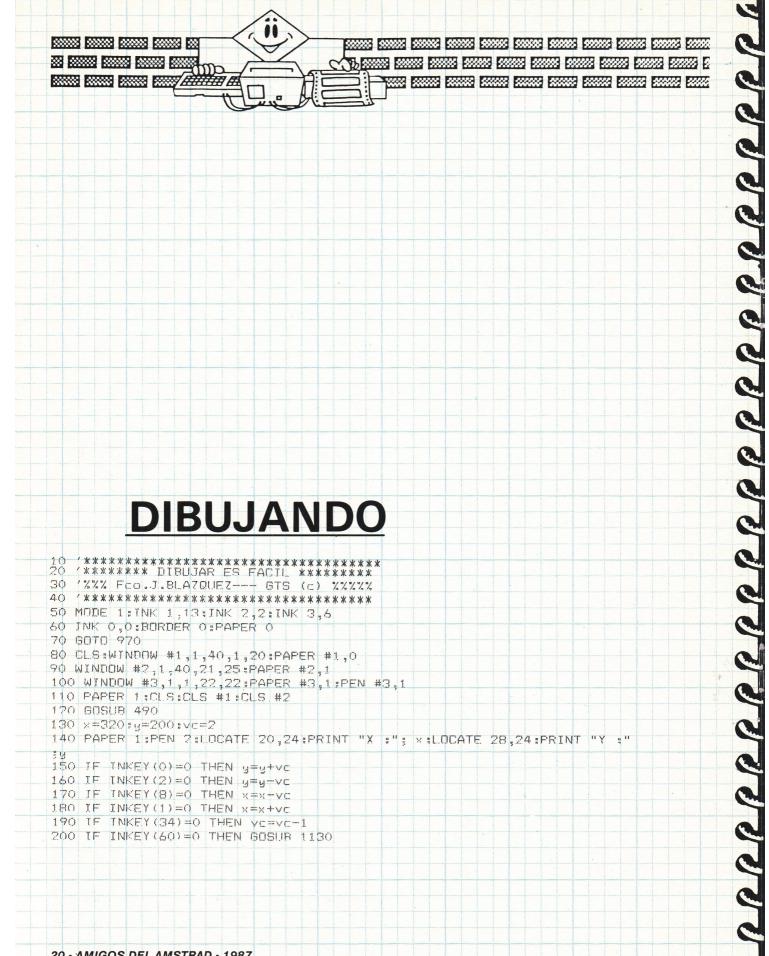
":PRINT #1,"



```
160 LOCATE 15,1: PAPER O: PEN 2: PRINT "QUINIELA": LOCATE 14,2: PAPER O: PEN
 1:PRINT STRINGs(10,"=")
170 \text{ ap=INT}(10*(RND(1)))
180 JF ap>=0 AND ap<7 THEN aps="1"
190 IF ap=7 OR ap=8 THEN aps="X"
200 TF ap=9 THEN aps="2"
210 PAPER #2,0:PEN #2,2:PRINT #2," Partido n:";n;".."
220 PAPER #1,0:PEN #1,3:PRINT #1," ";ap#
230 n=n+1:IF n>14 THEN GOSUB 250
240 GOTO 170
250 LOCATE 2,23:PAPER 0:PEN 3:PRINT " PULSA TECLA <0> PARA OTRA QUINIE
1 A":
260 LOCATE 1,25:PAPER 0:PEN 3:PRINT " PULSA TECLA <C> PARA VOLVER AL M
ENU
270 JF TMKEY (62) = 0 THEN 60TO 20
280 IF INKEY (34) = 0 THEN GOTO 100
290 GOTO 270
300 DRJGIN 110,95:DRAW 0,265,1:DRAWR 340,0:DRAWR 0,-265:DRAWR +340,0
310 RETURN
320 /****** QUINIELAS AL AZAR ******
330 MODE 1:INK 0,13:BORDER 13:JNK 1,3:INK 2,0:INK 3,0
340 PEN 3:PAPER 0:LOCATE 4,5:PRINT"Fco.j.Blazquez (1985)
350 LOCATE 4,4:PRINT" QUINIELAS AL AZAR
360 FOR f=9 TO 22:LOCATE 15,f:PEN 1:PRINT "1X21X21X21X21X21X21X21X21X2
370 LOCATE 4.f:PEN 3:PRINT "apuesta ":NEXT
380 FOR g=1 TO 14:LOCATE 11,9+8:PEN 3:PRINT g:NEXT
390 FOR f=9 TO 22:FOR u=15 TO 36 STEP 6:LOCATE u,f:PEN 0:PAPER 1:PRINT
 "IX2":NEXT (L:NEXT
400 LOCATE 15,23:PRINT " 1 ":LOCATE 21,23:PRINT " 3 ":LOCATE 27,23:PRI
NT " 5 ":LOCATE 33,23:PRINT " 7 "
410 LOCATE 18,23:PEN 1:PAPER 0:PRINT" 2 ":LOCATE 24,23:PRINT " 4 ":LOC
ATE 30,23:PRINT " 6 ":LOCATE 36,23:PRINT " 8 "
420 FOR k=224 TO 608 STEP 16:ORÍGIN k,47:DRAW 0,224,1:NEXT
430 FOR k=47 TO 271 STEP 16:ORIGIN 224,k:DRAW 384,0,1:NEXT
440 ORIGIN 38,48:DRAW 570,0,1:DRAWR 0,-16:DRAWR -570,0:DRAWR 0,16
450 ORIGIN 38,96:DRAW 570,0,1
440 ORIGIN 38,144:DRAW 570,0,1
470 ORIGIN 38,208:DRAW 570,0,1
480 DRIGIN 4,20:DRAW 618,0,2:DRAWR_0,350:DRAWR_618,0:DRAWR_0,+350
490 ORIGIN 20,360:DRAW 584,0:DRAWR 0,-58:DRAWR -584,0:DRAWR 0,58:DRIGI
N 440,360:DRAW 0,-58
500 LOCATE 1,1:PRINT CHR$(22)
510 LET ap=[NT(10*(RND(1)))
520 FOR j=9 TO 22
530 LET ap=INT(10*(RNU(1)))
540 IE ap>=0 AND ap<7 THEN LET px=0
550 IF ap=7 OR ap=8 THEN LET px=1
560 IF ap=9 THEN LET px=2
570 LOCATE 15+of+px, j:PEN 3:PRINT "X":NEXT
580 LOCATE 1,1:PEN O:PAPER O:PRINT CHR$(22),1:
590 LOCATE 1,25:PAPER 0:PEN 3:PRINT " <8>-- VUELTA MENU
                                                            ≺C>-+ Otra a
puesta"
```

600 TF INKEY(54)=0 THEN GOTO 20 610 IF INKEY(62)=0 THEN GOTO 640 620 GOTO 590 630 CLEAR:GOTO 330 640 nf=nf+3:IF nf>23 THEN GOTO 630 650 GOTO 500





#### **DIBUJANDO**

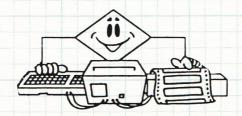
```
****** DIBUJAR ES FACIL *******
```

- 30 /%%% Fco.J.BLAZQUEZ--- GTS (c) %%%%%
- 40 \*
- 50 MODE 1: INK 1,13: INK 2,2: INK 3,6
- 60 INK 0,0:BORDER 0:PAPER 0
- 70 GOTO 970
- 80 CLS:WINDOW #1,1,40,1,20:PAPER #1,0
- 90 WINDOW #2,1,40,21,25:PAPER #2,1
- 100 WINDOW #3,1,1,22,22:PAPER #3,1:PEN #3,1
- 110 PAPER 1:CLS:CLS #1:CLS #2
- 120 GOSUB 490
- $130 \times = 320 : u = 200 : \sqrt{c} = 2$
- 140 PAPER 1:PEN 2:LOCATE 20,24:PRINT "X :"; x:LOCATE 28,24:PRINT "Y :"
- 150 JF INKEY (0) =0 THEN y+y+ve
- 160 IF INKEY(2)=0 THEN y=y-vc
- 170 IF INKEY (8) =0 THEN x = x vc
- 180 IF INKEY(1)=0 THEN x=x+vc
- 190 TF TNKEY(34)=0 THEN  $\sqrt{c}=\sqrt{c}-1$
- 200 IF INKEY(60)=0 THEN GOSUB 1180

oppose and added and added added and 210 JF INKEY (36) = 0 THEN GOSUB 1170 220 JF INKEY(27)=0 THEN  $\sqrt{c}=\sqrt{c}+1$ 230 IF Vc>20 THFN Vc=20 240 IF VC<1 THEN VC=1 250 LOCATE 34,22:PAPER 1:PEN 2:PRINT VC 260 IF INKEY (64) = 0 THEN GOSUB 520 270 JF INKEY (65) =0 THEN GOSUB 610 280 IF INKEY (57) = 0 THEN GOSUB 700 290 JF INKEY(56)=0 THEN GOSUB 800 300 JF INKEY (49) = 0 THEN GOSUB 900 310 IF INKEY(9)=0 THEN GOSUB 950 320 IF INKEY(41)=0 THEN GOSUB 960 330 JF INKEY (48) = 0 THEN GOSUB 940 340 TF INKFY (40) =0 THEN 1=1:GOSUB 490 350 JF INKEY (33) =0 THEN 1=2:GOSUB 490 340 IF INKEY (32) = 0 THEN 1=3:GOSUB 490 370 IF INKEY(25)=0 THEN 1=0:GOSUB 490 380 IF INKEY (69) +0 THEN GOSUB 1120 390 GOSUB 410 400 GOTO 140 410 PRINT #3,CHR\$(23);CHR\$(1); 420 ORIGIN ×, y 430 MOVER -8,0 : DRAWR 16,0,1 440 MOVER -8,-8: DRAWR 0,16 450 FOR j=0 TO 10:NEXT 460 DRAWR 0, -16: MOVER 8,8 470 DRAWR -16,0: MOVER 8,0 480 PRINT #3,CHR\$(23);CHR\$(0):RETURN 490 CLS #2:PEN #2,2:PEINT #2:PRINT #2," X e Y FIJADOS :";pp;",";pf;" V.CURSOR :" 500 PRINT #2:PRINT #2," LAPIT ": LOCATE 9,24:PEN 1:PRINT CHR#(143) 510 RETURN 520 CLS #2:PRINT #2:JNPUT #2,"En que grado empiezo ";gi 530 PRINT #2:INPUT #2, "En que grado termino ";gt 540 JF gj>gt GOTO 520 550 PRINT #2:INPUT #2,"Dame radio ";r 560 PRINT #2:INPUT #2, "Salto ";s 570 JE S=0 THEN GOTO 560 580 FOR pedi TO gt STEP s:DEG:ORIGIN x,y:DRAW r\*SIN(p),r\*COS(p),1:NEXT 590 GOSUB 490 600 RETURN 610 CLS #2:PRINT #2:INPUT #2,"En que grado empiezo ":gi 420 PRINT #2:INPUT #2,"En que grado termino ";gt 630 IF gi>gt GOTO 610 640 PRINT #2:INPUT #2,"Dame radio ";r 650 PRINT #2:INPUT #2, "Salto ";5 660 IF s=0 THEN GOTO 650 670 FOR p=gi TO gt STEP s:DEG:ORIGIN x,y:PLDT n\*SIN(p),n\*COS(p),1:NEXT 1987 - AMIGOS DEL AMSTRAD - 21

```
orreperenter proportion proportio
680 GOSUB 490
690 RETURN
700 CLS #2:PRINT #2:INPUT #2, "En que grado empiezo ";gi
710 PRINT #2:INPUT #2,"En que grado termino ";gt
720 IF gibat GOTO 700
730 PRINT #2:INPUT #2,"Dame radio 1";r1
740 PRINT #2:INPUT #2,"Dame radio 2";r2
750 PRINT #2:INPUT #2,"Salto ";s
760 IF 5=0 THEN GOTO 750
770 FOR pegi TO gt STEP s:DEG:ORIGIN x,y:PLOT r1*SIN(p),r2*COS(p),1:NE
XT
780 GOSUB 490.
790 RETURN
800 CIS #2:PRINT #2:INPUT #2,"En que grado empiezo ";gi
810 PRINT #2:INPUT #2,"En que grado termino ";gt
820 IF gi>gt 60T0 800
830 PRINT #2:JNPUT #2, "Dame radio j";rt
840 PRINT #2:INPUT #2,"Dame radio 2";n2
850 PRINT #2:INPUT #2,"Salto ";s
860 TF 5=0 THEN GOTO 850
870 FOR pegi TO gt STEP s:DEG:ORIGIN x,y:DRAW ri*SIN(p),r2*COS(p),i:NE
XT
880 GOSUB 490
890 RETURN
900 CLS #2:PRINT #2:INPUT #2," LADO ";6
910 ORIGIN x-(b/2),y-(b/2):DRAWR b,0,1:DRAWR 0,b:DRAWR -b,0:DRAWR 0,-b
920 GOSUB 490
930 RETURN
940 CLS #1:RETURN
950 LET pp=x:JET pf=y:GDSUB 490:RETURN
960 ORIGIN pp,pf:DRAW x-pp,y-pf,1:GOSUB 490:RETURN
970 CLS:
980 PEN 2:PRINT "
                                           DIBUJAR
                                                                         ES
                                                                                         FACIL
990 PRINT:PRINT:PEN 1:PRINT" Este programa sirve para dibujar de un
                                                                                 modo sencillo y entretenido.Con
  solo
                                                                                              un poco de practica po
dras dibujar hasta
1000 PRINT " donde tu imaginacion sea capaz de
                                               llegar."
1010 PRINT :PRINT "
                                                      FULSA TECLA PARA SEGUIR
                                                                                                               ":WHILE TNKEY#="
" :WEND
1020 PEN 3:PRINT :PRINT:PRINT " TECLAS
                                                                                                                           FUNCION
1030 PEN 1:PRINT "
                                            [1].....Circulos
 1040 PRINT " [4].......Elipses llenas
 ......Cuadrados
                                                     [8].......
          ..........Traza linea
                                                                                                             ....Pen 1(gris) "
1050 PRINT " [9]............Pen 2(azul) [0]..
    .....Pen 3(rojo)
                                        PYl. . . . . . . . . . . . . . . . . . Fija el origen
                                                                                                                      para la linea
```

1060 PRINT " [A]+CURSOR.....Pinta raya ........ V,cursor 1070 PRINT:PRINT " Para borrar pinta encima con negro "
1080 PEN 3:PRINT:PRINT " PULSA [E] PARA EMPEZAR " 1090 PEN 1:PRINT:PRINT "%%%%% Fco.J.Blazquez - GTS (c) 85 %%%%%%" 1100 IF INKEY (58) = 0 THEN GOTO 80 1110 GOTO 1100 1120 ORIGIN x,g:PLOT 0,0,1:RETURN 1130 CLS #2:PRINT #2:INPUT #2," DAME NOMBRE ";n# 1140 SAVE n#,B,&C000,&4000 1150 GOSUB 490 1160 RETURN 1170 CLS #2:PRINT #2:INPUT #2," DAME NOMBRE ";n# 1180 LOAD n\$,&COOO 1190 GOSUB 490 1200 RETURN





## **EJEMPLOS**

160 LOCATE 27,11:PEN 1:PRINT "= ";CHR\$(240)

```
10 /******** EJEMPLOS ********
                                     ***** DE AYUDA A LA REVIST
******
******
20 MODE 1:INK 1,26:INK 0,0:BORDER 0:INK 2,2:INK 3,18
30 GOTO 570
40 CLS: ******* EJEMPLO 1 ********
50 PRINT:PRINT:PRINT "
                      JUEGO DE CARACTERES REDEFINIBLES
                    ____":PRINT:PRINT:PEN #2,3
60 WINDOW #2,2,39,6,25
70 FOR n=32 TO 255
80 PRINT #2," ";CHR$(n);" ";
90 NEXT
100 RETURN
110 CLS: '******* EJEMPLO 2
120 PEN 1:LOCATE 20,7:PRINT CHR$(143);CHR$(143):LOCATE 19,8:PRINT STRI
NG$(4,CHR$(143)):LOCATE 18,9:PRINT STRING$(6,CHR$(143)):LOCATE 17,10:P
RINT STRING#(8,CHR#(143))
130 FOR n=11 TO 14:LOCATE 20, n:PRINT CHR$ (143):CHR$ (143):NEXT
140 FOR m=0 TO 128 STEP 16:ORIGIN 254+m,175:DRAW 0,128,2:ORIGIN 254,17
5+m:DRAW 128,0,2:NEXT
150 PEN 3:LOCATE 12,4:PRINT "CARACTER n: 240"
```

170 RETURN

and developed and advantable belone 180 CLS: '\*\*\*\*\*\* EJEMPLO 3 190 PEN 1 200 PEN 1:LOCATE 10,7:PRINT STRING\*(2,CHR\*(143)):LOCATE 9,8:PRINT STRI NG\$(4,CHR\$(143)):LOCATE 8.9:PRINT STRING\$(6,CHR\$(143)):LOCATE 7,10:PRI NT STRING\$(8,CHR\$(143)) 210 FOR n=11 TO 14 \*LOCATE 10,n :PRINT CHR\$ (143) ;CHR\$ (143) :NEXT 220 PEN 3:LOCATE 2,4:PRINT " CARACTER n: 240 NOTACION BINARIA 230 FOR m=0 TO 128 STEP 16:ORIGIN 94+m,175:DRAW 0,128,2:ORIGIN 94,175+ m:DRAW 128,0,2:NEXT 240 PEN 1:FOR 1=7 TO 14:LOCATE 18,1:PRINT "=":NEXT 250 WINDOW #1,23,30,7,15:PRINT #1,"0001100000111100011111101111111111000 110000001100000011000000011000" 260 IF popo=4 THEN GOTO 280 270 RETURN 280 '\*\*\*\*\*\* EJEMPLO 4 290 PEN 2:FOR 1=7 TO 14:LOCATE 21,1:PRINT "&X":NEXT 300 RETURN 310 CLS: / \*\*\*\*\*\* EJEMPLO 5 320 PEN 1:LOCATE 5,7:PRINT STRING\$(2,CHR\$(143)):LOCATE 4,8:PRINT STRIN G\$(4,CHR\$(143)):LOCATE 3,9:PRINT STRING\$(6,CHR\$(143)):LOCATE 2,10:PRIN T STRING\*(8,CHR\*(143)) 330 FOR 1=7 TO 14:LOCATE 5,1:PRINT CHR\$(143);CHR\$(143):NEXT 340 LOCATE 1,2:PEN 1:PRINT " 128 32 350 LOCATE 1,17:PRINT " 16 1" 360 FOR m=0 TO 128 STEP 16:0RIGIN 14+m,175:DRAW 0,128,2:0RIGIN 14,175+ m:DRAW 128,0,2:NEXT 370 DRIGIN 37,174:DRAW 0,-25,3:DRIGIN 73,174:DRAW 0,-41:DRIGIN 105,174 :DRAW 0,-56:ORIGIN 135,174:DRAW -10,-70 380 DRIGIN 22,305:DRAW 10,60,3:DRIGIN 55,305:DRAW 0,45:DRIGIN 87,305:D RAW 0,30:ORIGIN 119,305:DRAW 0,14 390 ORIGIN 38,174:DRAW 0,-25:ORIGIN 71,174:DRAW 3,-41:ORIGIN 100,174:D RAW 6,-57:ORIGIN 132,174:DRAW -8,-73 400 RETURN 410 '\*\*\*\*\*\*\*\* EJEMPLO 6 420 WINDOW #4,13,22,7,15:PRINT #4,"%X00011000%X00111100%X01111110%X111 111118X000110008X000110008X000110008X00011000" 430 PEN 3:LOCATE 10,4:PRINT "NOTACION BINARIA HEXADECIMAL" 440 WINDOW #3,33,35,7,15:PRINT #3," 24 60128255 24 24 24 24" 450 RETURN 460 /\*\*\*\*\*\*\*\*\*\*\* E.JEMPLD 7 470 CLS:PEN 1:PRINT:PRINT:PRINT " ESTE PROGRAMA EXPONDRA EN PANTALLA EL CARACTER QUE HAYAS CREADO " 480 PRINT:PRINT " EN CASO DE INTRODUCIR LOS DATOS EN HAS DE OLVIDARTE DE PONER < &X > DELANTE DE LAS OCHO CIFRAS EJ: &X11100111" 490 PRINT:PRINT:PRINT " EN CASO DE ROMPERSE EL PROGRAMA ,SE A UNA INTRODUCCION INCORRECTA DE ALGUN DATO: TECLEA < RUN > YUELVE A INTENTARLO CON CUIDADO"

```
500 SYMBOL AFTER 230
510 FOR x=1 TO 8
520 PRINT:PRINT " El valor de a";x;:INPUT " es ";a(x)
530 NEXT
540 SYMBOL 231,a(1),a(2),a(3),a(4),a(5),a(6),a(7),a(8)
550 CLS:LOCATE 1,6:PRINT:PRINT:PRINT " ESTE ES TU CARACTER = ";CHR$(23
1)
560 RETURN
570 C/S:PEN 3:PRINT "
                                  ILUSTRACIONES
  一 林林林林林林林林林林林林 " "
580 LOCATE 1.24:PEN 2:PRINT " | FCO.J.BLAZQUEZ - GTS (c) -1985-":LOCA
TE 1,5
590 PRINT:PRINT:PRINT:PEN 1:PRINT" | Esta seccion ha sido ideada con
la finalidad de servir como complemento ilustrativo a los concepto
s que en la revista se explican."
600 PRINT PRINT " Escoja en cada momento el ejemplo que en ella se
mencione...":PRINT
610 FOR v=1 TO 7:PRINT " [';v;"].... Ejemplo";v:NEXT
620 JF INKEY (64) = 0 THEN GOSUE 700
630 IF INKEY(65)=0 THEN GOSUB 710
640 IF INKEY (57) = 0 THEN GOSUB 720
650 TF INKEY (56) = 0 THEN GOSUB 730
660 TF
       INKEY(49)=0 THEN GOSUB
                              740
       INKEY(48)=0 THEN GOSUB 750
670 TF
680 TF (NKEY(41)=0 THEN GOSUB 760
690 GUTO 620
700 GOSUB 40:GOTO 770
710 GOSUB 110:GOTO 770
720 GUSUB 180:60T0 770
730 GOSUB 180:60SUB 280:60T0 770
740 GOSUB 310:GOTO 770
750 GOSUB 310:GOSUB 410:GOTO 770
760 GOSUB 460:GOTO 770
770 PEN 3:LOCATE 6,25:PRINT " PULSA TECLA [M] PARA MENU ""
780 IF INKEY (38)=0 THEN GOTO 570
790 GOTO 780
```





```
anerererererererererererererere
230 PRINT CHR$(22):LOCATE 1,1:PFN 1:PRINT STRING$(40,CHR$(255)):PEN 3:
LOCATE 1,1:PRINT STRING$(40,CHR$(249)):PEN 1
240 LOCATE 1,21:PEN 1:PRINT STRING*(40,CHR*(254))
250 LOCATE 1,21:PEN 3:PRINT STRING$(40,CHR$(249))
260 FOR n=1 TO 21:AFN 1:LOCATE 1,n:PRINT CHR$(253):LOCATE 40,n:PRINT C
HR#(253):PEN 2:LOCATE 1,n:PRINT CHR#(252):LOCATE 40,n:PRINT CHR#(252):
270 FOR b=22 TO 24: OCATE 1,b:PEN 3:PRINT STRING$(40,CHR$(249)):FEN 2:
LOCATE 1,6:PRINT STRING*(40,CHR*(252)):NEXT:PEN 0:LOCATE 1,25:PRINT CH
R$(22),1:PEN 1:LOCATE 12,12
280 PEN 1:LDCATE 4.23:PRINT " PUNTOS ":CHR*(250):" :":p
290 PEN 1:LOCATE 24,23:PRINT " PUNTOS ":CHR#(251):" :":c1
300 PEN 1: LOCATE 17,25: PRINT "Fco.J.Blazquez- GTS (c)"
310 PEN 2:LDCATE x,g:PRINT CHR$(250):CALL &BD19:LOCATE x,g:CALL &BD19:
PRINT " "
320 PEN 3:LOCATE x1,91:PRINT CHR$(251):CALL &BD19:LOCATE x1,91:CALL &B
D19 : PRINT " "
330 IF INKEY(69)=0 THEN 1=1-1
340 IF INKEY (71) = 0 THEN y=y+1
350 IF INKEY(63)=0 THEN x=x-1
360 \text{ TF INKEY} (62) = 0 \text{ THEN } x = x + 1
370 IF INKEY(13)=0 THEN 41=41-1
380 IF INKEY(15)=0 THEN y_1 = y_1 + 1
370 IF YNKEY(7) = 0 THEN \times 1 = \times 1 - 1
400 IF INKEY(6)=0 THEN \times 1 = \times 1 + 1
410 IF \times < 2 THEN \times = 2
420 \text{ TF x} 1 \text{K2 THEN } \text{x} 1=2
430 IF x>39 THEN x=39
440 IF x1039 THEN x1=39
450 IF y<2 THEN y=2
       y1K2 THEN y1=2
460 IF
470 JF
       y>20 THEN y=20
       y1>20 THEN y1=20
480 IF
490 IF NOT TEST ((16*(x-1)), 400-(16*y)) = 0 THEN GOSUB 550
500 IF NOT TEST((16*(x1-1)),400-(16*y1))=0 THEN GOSUB 560
510 t=t+1;IF t>25 THEN 608UB 570
520 ot=ot+1:IF ot>40 THEN GOSUB 730
530 TF p>49 OR p1>49 THEN GOTO 620
540 GOTO 310
550 LET p=p+1:SOUND 3,200,2,15:LOCATE 16,23:PEN 1:PRINT p:RETURN
560 LET pl=p1+1:SOUND 2,300,2,15:LOCATE 36,23:PEN 1:PRINT p1 :RETURN
570 SOUND 1,2500,2,13
580 t=0
590 LET j=INT(36*(RND(1)))
600 \text{ LET } q = INT(19 \times (RND(1)))
610 LOCATE 1,25: PRINT CHR$ (22): LOCATE 2+j,2+g: PFN 1: PRINT CHR$ (248): LO
CATE 2+j,2+g:PEN 3:PRINT CHR$(247):PEN 0:LOCATE 1,25:PRINT CHR$(22),1:
RETURN
```

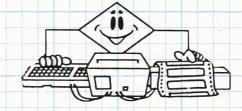
28 - AMIGOS DEL AMSTRAD - 1987

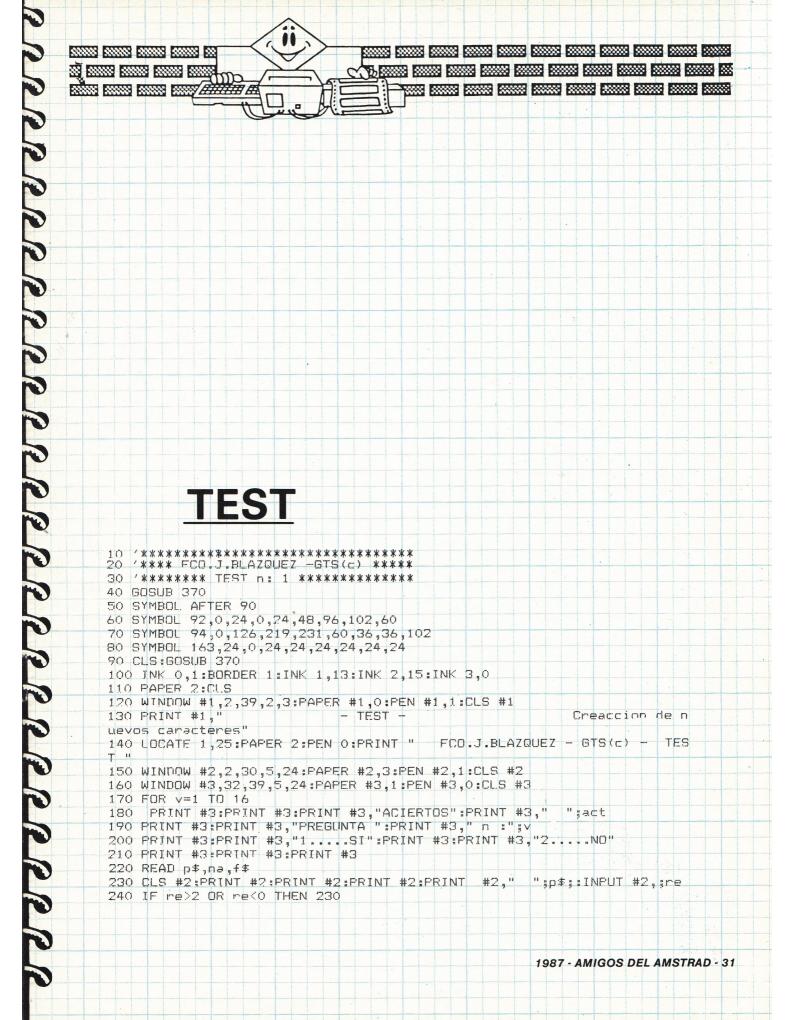
oppose a suppose of the suppose of t 620 WINDOW #1,2,39,2,20:CLS #1 630 IF p p1 THEN and=250 640 JF p>p1 THEN gd=251 p<pl>p<pl>j<pl>p<pl>f<pl>p<pl>f<pl>o</pl> 650 IF 660 IF popt THEN gd=250 670 FRINT #1 :PRINT #1 :PRINT #1 :PEN #1,1 :PRINT #1," -----BRAVO ! , , " (C HR# (gnd) ;" HAS CONSEGUIDO ROMPE R EL HECHIZO. . . . TU AFARIENC TA ES AHORA NURMAL

680 PRINT #1:PRINT #1;" OYE... ";UHK#1

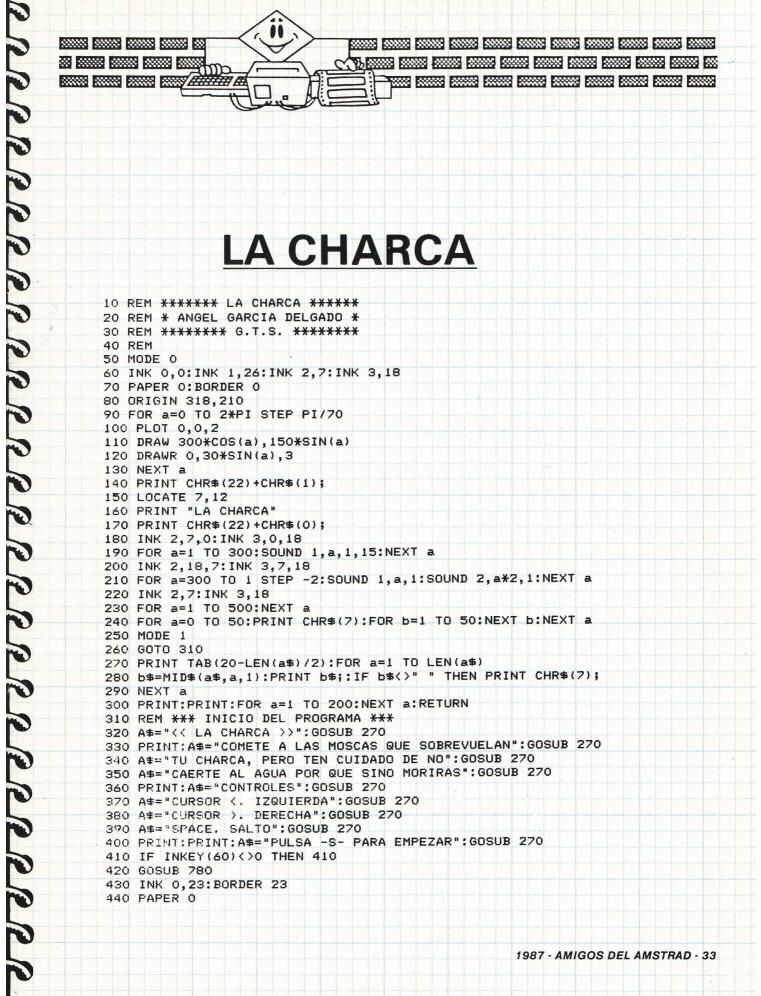
680 PRINT #1:PRINT #1;" SIGUE PROBANDO..." TA ES AHORA NORMAL " DYE... ";CHR\$(gd) 700 PRINT #1 PRINT #1 PRINT #1," PULSA (ENTER) PARA OTRA PARTIDA " 710 IF INKEY (18) = 0 THEN GOTO 10 720 GOTO 710 730 SOUND 1,500,2,13 740 dt=0 750 LET h=INT(36\*(RND(1)))760 LET d = INT(19\*(RND(1)))770 LOCATE 1,25:PRINT CHR#(22):LOCATE 2+6,2+u:PEN 2:FRINT CHR#(246):LO CATE 2+h,2+a:PEN 3:PRINT CHR\$(245):LOCATE 2+h,2+u:PEN 1:PRINT CHR\$(244 ):PEN 0: OCATE 1,25:PRINT CHR\$(22),1:RETURN 780 OLS 790 LOCATE 1 25 PRINT "HE" 800 FOR m=1 TO 32 810 FOR h=0 TO 15 820 ORIGIN 0,0:IF NOT TEST(m,n)=0 THEN GOSUB 850 830 NEXT NEXT 840 GOTO 870 850 4 860 SOUND 1,400,2,14:LDCATE 10+(m/1.5),10+(h/2):PEN 1:PRINT CHR\$(248): LOCATE 10+(m/1.5),10-(n/2):PEN 2:PRINT CHR\*(247):RETURN 870 PEN 1:LOCATE 1,25:PRINT "CHI" 880 FOR m=1 TO 48 890 FOR n=0 TO 15 900 ORIGIN 0,0:1F NOT TEST(m,n)=0 THEN GOSUB 920 910 NEXT:NEXT:GOTO 980 920 SOUND 1,400,2,14; LOCATE 5+(m/1.5),18-(n/2):PEN 1:PRINT CHR\$(248):L OCATE 5+(m/1.5),18-(h/2):PEN 2:PRINT CHR\*(247):RETURN 930 LOCATE 1,25:PRINT "ZO " 940 FOR m=1 TO 32 950 FOR n=0 TO 15 960 ORIGIN 0,0:IF NOT TEST(m,n)=0 THEN GOSUB 980 970 NEXT:NEXT:GOTO 990 980-SOUND 1,400,2,14:LOCATE 10+(m/1,5),26-(h/2):PEN-1:PRINT CHR#(248): LOCATE 10+(m/1.5),26-(n/2):PEN 2:PRINT CHR\*(247):RETURN 990 LOCATE 1,25:PRINT " ":FOR k=1 TO 5300:NEXT 1000 CLS:PRINT CHR#(22):LOCATE 1,1:PEN 1:PRINT STRING#(40,CHR#(255)):P EN 3:LOCATE 1,1:PRINT STRING\$(40,CHR\$(249)):PEN 1:LOCATE 1,24:PEN 1:PR INT STRING\$(40,CHR\$(254)):LOCATE 1,24:PEN 3:PRINT STRING\$(40,CHR\$(249) 1987 - AMIGOS DEL AMSTRAD - 29

1010 FOR h=1 TO 24:PEN 1:LOCATE 1,h:PRINT CHR\$(253):LOCATE 40,h:PRINT CHR\$(253):PEN 2:LOCATE 1,n:PRINT CHR\$(252):LOCATE 40,h:PRINT CHR\$(252) :NEXT:PEN 0:LOCATE 1,25:PRINT CHR\$(22),1:PEN 1:LOCATE 12,12 1020 WINDOW #6,2,39,2,23:PEN #6,1 1030 PRINT #6:PRINT #6," Consequiras recobrar tu aspecto normal tras el HECHIZO ?" 1040 PRINT #6:PRINT #6," Para ello consigue 50 ptos antes que tu hermano de desgracia..." 1050 PRINT #6:PRINT #6," MANDOS 1060 LUCATE 7,13:PEN 2:PRINT CHR#(250):LUCATE 30,13:PEN 3:PRINT CHR#(2 1070 LOCATE 4,15:PEN 1:PRINT "CAT..Subir [1]..Subir" 1080 LDCATE 4,17:PEN 1:PRINT "[Z]..Bajar -COJ..Bajar" 1090 LOCATE 4,19:PEN 1:PRINT "[X]..Izquierda [.]..Izquierda"
1100 LOCATE 4,21:PEN 1:PRINT "[C]..Derecha [enter]..Derecha"
1110 LOCATE 7,23:PEN 3:PRINT " PULSA <E> PARA EMPEZAR "
1120 PEN 1:LOCATE 1,25:PRINT " Fco.J.Blazquez - GTS (c) - 1985 " 1130 (F INKEY(58)=0 THEN GOTO 220 1140 GOTO 1130





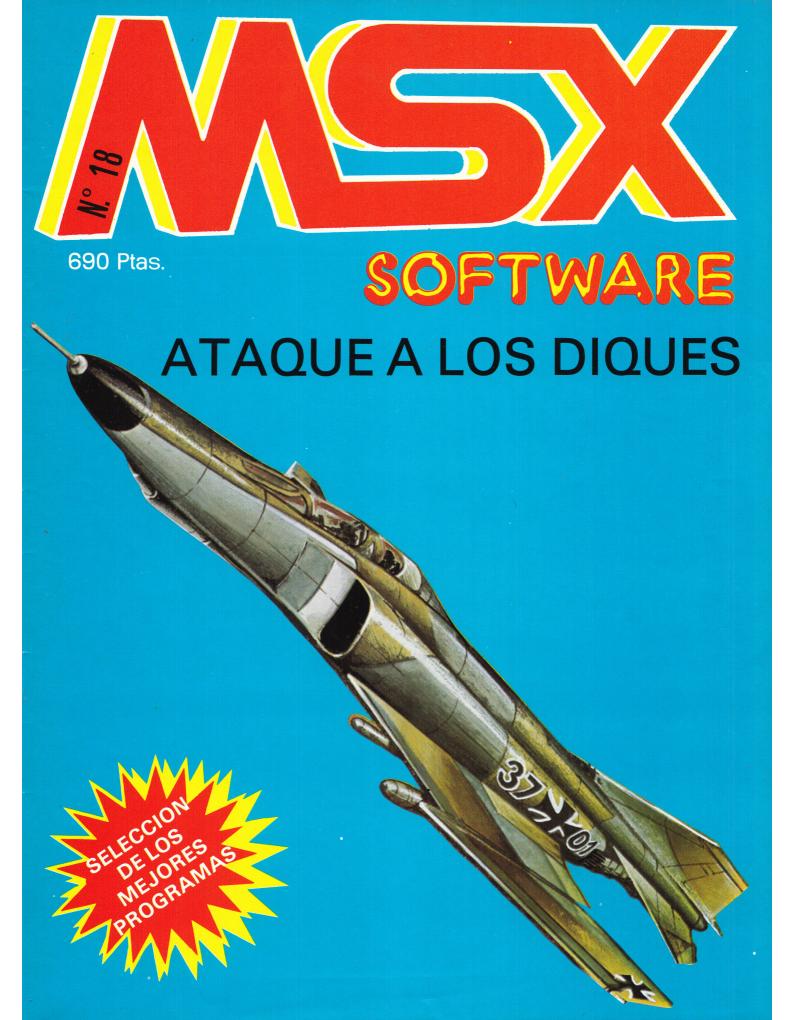
```
250 LET re=INT(re)
260 If re=na THEN GOSUB 290
270 IF NOT re=na THEN GOSUR 330
280 NEXT:6010 540
290 CLS #2:PRINT #2:PRINT #2:PRINT #2:PRINT #2,"
                                                      ###ACIERTO!!!
300 act = act + 1
310 FOR m=1 TO 2900:NEXT:CLS #2
320 RETURN
330 CLS #2:PRINT #2:PRINT #2:PRINT #2:PRINT #2,"
                                                      ### ERROR !!!
11 #
340 PRINT #2:PRINT #2, f $
350 FOR m=1 TO 2900:NEXT:CLS #2
360 RETURN
370 DATA " Si tecleamos :
 PRINT CHR$(2)
                                                           \Aparecera alg
o en pantalla ",2," No.Tiene valor de funcion "
380 DATA " \Es necesario usar
   DATA " \Es necesario usar una cuadricula
los nuevos caracteres",2," No,Tan solo hasta
                                          una cuadricula para formar
                                                                tener pra
ctica."
390 DATA " \Es correcto el comando : | symbol after 300",2,"Tan so
lo tenemos del 0 al 255"
400 DATA "
                  `Symbol after 250' \Neja libres 6 caracteres",1,"
Si,pues el 250 esta incluido."
410 DATA " \ Es obligatorio el uso de
                                          < Symbol after >",?," Solo si
definimos un caracter menor de 240"
420 DATA " \ Es obligatorio el uso de | < Symbol >",1," Si pues deter
mina el numero de caracter "
430 DATA " El valor binario de linea | a1=00101000 \ Es correcto",2,"
Hemos olvidado anteponer <&X>"
440 DATA "\Los valores de al..a8 pueden ir en binario y hexadecimal
  a la vez",1," Si se puede siempre que no olvidemos poner &X en bin
ario
450 DATA " \Es correcto lo siguiente :? %X00001111=15( En hex.)",1\""
460 DATA "\El valor \Hex' de &X11110000 es 240",1,
470 DATA "\El valor \Hex' de %X10000001 es 129"
480 DATA "\El valor \Hex' de &X11100001 es 100",2,
490 DATA "\El valor \Hex' de &X00001000es 10",2,
500 DATA "\El valor \Hex' de &X00011000es 24",1,
510 DATA "\Es valida la expresion ... symbol 40,255,256,1,1,0,1,1",2,
" No pues ningun numero Hex. es mayor de 255"
520 DATA "\ Corresponden las cifras hex 0,126,219,231,60,36,36,102
al caracter...^ ",1,
530 RETURN
540 MODE 1
550 INK 0,0:BORDER 0:INK 1,26:PEN 1:PAPER 0
560 CLS
570 PRINT:PRINT:PRINT " FINAL DE TEST
580 PRINT:PRINT " Has acertado ";act;" preguntas "
590 LET act=(act*100)/16
600 PRINT:PRINT " Eso significa el";act:"%"
610 FEN 2:PRINT:PRINT:PRINT " PULSA TECLA (A) PARA OTRO TEST "
620 JF INKEY (69) = 0 THEN 640
630 GOTO 620
640 CLS:C/ FAR:GOTO 40
```



#### LA CHARCA

```
10 REM XXXXXXX LA CHARCA XXXXXX
20 REM * ANGEL GARCIA DELGADO *
30 REM ****** G.T.S. ******
40 REM
50 MODE 0
60 INK 0,0:INK 1,26:INK 2,7:INK 3,18
70 PAPER O: BORDER O
80 ORIGIN 318,210
90 FOR a=0 TO 2*PI STEP PI/70
100 PLOT 0,0,2
110 DRAW 300*COS(a), 150*SIN(a)
120 DRAWR 0,30*SIN(a),3
130 NEXT a
140 PRINT CHR$(22)+CHR$(1);
150 LOCATE 7,12
160 PRINT "LA CHARCA"
170 PRINT CHR$(22)+CHR$(0);
180 INK 2,7,0: INK 3,0,18
190 FOR a=1 TO 300: SOUND 1, a, 1, 15: NEXT a
200 INK 2,18,7:INK 3,7,18
210 FOR a=300 TO 1 STEP -2:SOUND 1,a,1:SOUND 2,a*2,1:NEXT a
220 INK 2,7: INK 3,18
230 FOR a=1 TO 500: NEXT a
240 FOR a=0 TO 50:PRINT CHR$(7):FOR b=1 TO 50:NEXT b:NEXT a
250 MODE 1
260 GOTO 310
270 PRINT TAB(20-LEN(a$)/2):FOR a=1 TO LEN(a$)
280 bs=MIDs(as,a,1):PRINT bs;:IF bs<>" " THEN PRINT CHRs(7);
290 NEXT a
300 PRINT:PRINT:FOR a=1 TO 200:NEXT a:RETURN
310 REM *** INICIO DEL PROGRAMA ***
320 A$="<< LA CHARCA >>":GOSUB 270
330 PRINT: A$="COMETE A LAS MOSCAS QUE SOBREVUELAN": GOSUB 270
340 A = "TU CHARCA, PERO TEN CUIDADO DE NO": GOSUB 270
350 A$= "CAERTE AL AGUA POR QUE SINO MORIRAS": GOSUB 270
360 PRINT: As="CONTROLES": GOSUB 270
370 A#="CURSOR <. IZQUIERDA":GOSUB 270
380 A#="CURSOR >. DERECHA": GOSUB 270
390 As="SPACE. SALTO":GOSUB 270
400 PRINT: PRINT: A$="PULSA -S- PARA EMPEZAR": GOSUB 270
410 IF INKEY(60)<>0 THEN 410
420 GOSUB 780
430 INK 0,23:BORDER 23
440 PAPER O
```

```
450 INK 1,0: INK 2,10: INK 3,18
460 MODE 1
470 WINDOW #1,1,40,20,25:PAPER #1,2:PEN#1,3
480 WINDOW #2,1,40,1,2
490 CLS#1
500 S$="
                                                  ":PRINT#1,S$;
           deeeef
                       deeeeeef
                                       deeeef
                                                                                     510 P=0:V=3
520 GOSUB 750
530 X=19:Y=20:XB=X:YB=Y
540 XM=2+INT (RND*16):YM=39
550 ENT 1,40,-1,1
560 ENT 2,40,-2,1
570 IF S=0 THEN IF NOT INKEY(47) THEN SOUND 1,100,15,10,0,1;S=16
580 IF $>0 AND $<9 THEN X=X+1
590 IF S>8 THEN X=X-1
600 IF S>O AND NOT INKEY(8) THEN Y=Y+1: IF Y<1 THEN Y=1
610 IF S>O AND NOT INKEY(1) THEN Y=Y+1: IF Y>40 THEN Y=40
620 YM=YM-1:IF YM(1 THEN LOCATE 1, XM:PRINT" ":YM=38:XM=4+INT(RND*14)
630 LOCATE YM, XM: PRINT"c "
640 LOCATE YB.XB:PRINT" ":LOCATE Y.X:IF S>O THEN PRINT"b"
650 IF SK1 THEN PRINT"a"
660 IF XM=X AND YM=Y THEN GOSUB 720
670 YB=Y:XB=X
680 S=S-1: IF S<0 THEN S=0
690 IF X=19 THEN IF MID$(S$,Y,1)=" " THEN GOSUB 710
700 GOTO 570
710 SOUND 4,500,30,10,0,1,31:LOCATE yB,xB:PRINT"g":V=V-1:GOSUB 750:$=0:Y=20:RETU
720 SOUND 1,100,20,10,0,2:LOCATE YM,XM:PRINT" "
730 P=P+15:GOSUB 750
740 YM=0:RETURN
750 LOCATE #2,3,1:PRINT#2, "PUNTOS: ";P:LOCATE #2,26,1:PRINT#2, "VIDAS: ";V
760 IF V(1 THEN GOTO 870
770 RETURN
780 SYMBOL AFTER 97
790 SYMBOL 97,0,24,60,90,126,255,90,195
800 SYMBOL 98,153,189,90,126,255,189,90,195
810 SYMBOL 99,195,165,153,126,219,255,165,129
820 SYMBOL 100, 255, 91, 54, 11, 5, 0, 0, 0
830 SYMBOL 101, 255, 251, 237, 85, 171, 0, 0, 0
840 SYMBOL 102,255,218,108,208,160,0,0,0
850 SYMBOL 103,34,0,136,1,32,10,128,18
860 RETURN
870 REM *** GAME OVER ***
880 FOR A=1 TO 20:FOR B=100 TO 200 STEP A:SOUND 1,B,1,15,0,0,31:NEXT B:NEXT A
890 INK 0,0:INK 1,26:INK 2,15,0:PAPER 0:BORDER 0:PEN 1:MODE 0
900 PEN 2:LOCATE 6,7:PRINT"GAME OVER"
910 PEN 1:LOCATE 4,12:PRINT PUNTOS: ";USING "######";P
920 PEN 3: INK 3,15:LOCATE 5,17:PRINT "OTRA? (S/N)"
930 FOR A=1 TO 50: A$=INKEY$: NEXT A
940 PEN 1
950 IF INKEY (60) =0 THEN RUN 250
960 IF INKEY (46) = 0 THEN CALL 0
970 GOTO 950
```



## CURSO DE BASIC + MICROORDENADORES

Microordenador ZX SPECTRUM prácticas con...

Microordenador COMMODORE

Microordenadores
AMSTRAD, MSX, PC

#### Para saber cómo hablar con los ordenadores

El Curso CEAC a Distancia, BASIC + Microordenadores, le va a introducir paso a paso, con un cuidado método, en uno de los temas más apasionantes de nuestros días:

#### la programación de ordenadores.

Al aprender PRACTICANDO desde un principio a programar BASIC, lenguaje diseñado especialmente para dar los primeros pasos en programación, estará sentando las bases para el estudio de cualquier otro lenguaje de alto nivel.

Curso CEAC de BASIC + Microordenadores: un diálogo permanente con el ordenador.



CENTRO DE ENSEÑANZA A DISTANCIA AUTORIZADO POR EL MINISTERIO DE E<sup>T</sup>UCACION Y CIENCIA N.º 8039185

(BOLETIN OFICIAL DEL ESTADO 3-6-83) Aragón, 472 (Dpto. 08013 Barcelona Tel.: (93) 245 33 06



ESTAS ENSEÑANZAS SE AJUSTAN AL ART. 35 DEL DECRETO 707/1976 Y A LA ORDEN MINISTERIAL DE 5/2/1979

#### **Otros Cursos:**

- Introducción a la Informática
- Electrónica (con experimentos)
- Contabilidad
- Fotografía
- Curso de Video
- Decoración

<b>GRATUITAMENTE</b>	NAME OF TAXABLE PARTY.	0200000000	ACCORDAGE.	<b>JEGORALIONA</b>	NEWS CONTRACTOR	0.000
GRATUITAMENTE		STATE OF THE PARTY			Section Section 2	aspo
	of the same	Mark the self-	20 S In 10	$\alpha n n$	- 1 . T la	<b>#</b> *
		F - 2 E.	0 J M F	- V L / I	-9 6 10	20 "

Ci	deseo recibir a la mayor brevedad posible informació
	brevedad posible información sobre el Curso de:

Nombi	re y apellidos	* ***		Edad
Domicilio	A STATE OF THE STA	1879		1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1
	N.º Piso	Pta	Tel	
C. Postal	Población		1-9-17	344 - 7
	Provincia			

Profesión \_\_\_\_\_

CEAC. Aragón, 472 (Dpto. ) 08013 Barcelona

